Conservation Buffers

Contour buffer strips alternating with crop strips. Along the bottom left is a grassed waterway filter strip. The trees make up an existing riparian forest buffer along a stream, and another grass filter strip follows the trees around the stream.

photo: NRCS Oklahoma

Buffers – Good for Conservation, Good for the Environment

Agriculture is in the crosshairs when it comes to environmental matters. Our nation is facing critical water quality challenges – too much nitrogen and phosphorous in some streams and lakes, and not enough oxygen in the Gulf of Mexico and other water bodies. Frequently, agriculture is blamed as a major culprit. But amid the gloom and doom, there's also some good news out there: CONSERVATION BUFFERS

What are Conservation Buffers?

Conservation Buffers are small areas or strips of land in permanent vegetation designed to intercept pollutants and manage other environmental concerns. Buffers include: riparian buffers, filter strips, grassed waterways, windbreaks / shelterbelts, living snow fences, contour buffer strips, cross-wind trap strips, field borders, alley cropping, herbaceous wind barriers, and vegetative barriers.

Strategically placed buffer strips in the agricultural landscape can effectively mitigate the movement of sediment, nutrients, and pesticides from farmed fields. When coupled with other management techniques such as crop residue management, nutrient management, and integrated pest management, buffer strips allow farmers to achieve a measure of economic and environmental sustainability in their operations. Buffer strips can also enhance wildlife habitat and protect bio-diversity.

Conservation buffers protect soil, improve air and water quality, enhance fish and wildlife habitat, and beautify the landscape. They show a commitment to conservation and willingness to protect the environment.

Benefits of Buffers

- ☒ Remove up to 50 percent or more of nutrients and pesticides in runoff
- ☒ Remove up to 75 percent or more of sediment in runoff

photo: USDA

- ☒Enhance water infiltration
- ☒Remove up to 60 percent or more of pathogens in runoff
- ☒Trap snow
- ☒Reduce blowing soil in areas with strong winds
- ☒Protect livestock and wildlife from harsh weather
- ☒Protect buildings from wind damage
- ☒Reduce noise and odor
- ☒Provide a source of food, nesting cover, and shelter for many wildlife species
- ☒Provide corridors that enable wildlife to move safely from one habitat to another
- ☒ Help stabilize streams and reduce water temperature
- ☒Offer a setback distance for agricultural chemical use from water sources

Like the trim on a house makes the house look better, well-planned conservation buffers improve the appearance of a farm or ranch. If used as a part of a comprehensive conservation system, buffers will make good use of areas that often should not be cropped.

photo: NRCS

Buffers Belong in Conservation

The permanent strips of vegetation work for you and your environment. They protect soil and water and make economic sense.

Conservation buffers work economically because of financial incentives available though USDA Conservation Programs – the Continuous Conservation Reserve Program (CCRP), the Environmental Quality Incentives Program (EQIP), the Wildlife Habitat Incentives Program (WHIP), and the Wetlands Reserve Program (WRP).

Buffers Do Not Represent New Technology

The benefits of buffers have been known for years. The 1996 Farm Bill revived the buffer concept and continues to provide the enticement to establish them. The Natural Resources Conservation Service is spearheading a drive to get more buffers in place.

To help you evaluate how buffers might benefit your land, here are brief descriptions of the most popular types and their primary purpose:

Filter Strips

Strips of grass used to intercept or trap field sediment, organic material, pesticides and other pollutants before they reach water bodies.

Riparian Buffers

Streamside plantings of trees, shrubs, and grasses that intercept contaminants from surface and ground water.

Contour Buffer Strips

Narrow bands of perennial vegetation established across the slope of a crop field and alternated down the slope with crop strips.

Grassed Waterways

Strips of grass seeded in areas of cropland where water concentrates or flows off a field – preventing gully erosion.

Shelterbelts/Field Windbreaks

Rows of trees or other plants used to reduce wind erosion, protect young crops, and shelter livestock and wildlife.

For More Information

For more information on this program or other USDA Natural Resources Conservation Service Programs, contact your local Natural Resources Conservation Service office or USDA Service Center, or check out the following websites: www.ok.usda.gov, www.ctic.purdue.edu / Core4 / buffer / Buffers.html, OR www.buffercouncil.org.

photo: NRCS Oklahoma

Contour buffer strips in wheat field located in Beaver, Oklahoma.

photo: USDA

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